

Accessing Universal Design Features towards Creating Accessible Tourism Facilities in Kuala Lumpur

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ABSTRACT

Accessible tourism is where the tourist destinations and facilities provided by the host country or place are barrier - free to all users especially persons with disabilities (PWDs). Nevertheless, Kuala Lumpur (KL) being a developing city, there are still issues on seamless mobility and improvement to be made on the accessibility to the PWDs when they travel in the city even though it has been declared to be barrier-free city in 2010. This study aims to investigate the provision and the quality of facilities accessible by the PWDs in the selected tourist attraction buildings in the city of KL. These tourism facilities have been accessed internally and externally by the trained buildings auditors. Using the universal design requirements derived from the Malaysian Standards (MS) as benchmark document, accessibility audits had been carried out in five (5) tourism buildings. The findings revealed that the building are equipped and design to be the disable friendly. However, certain facilities does not fulfil the universal design standards according to MS 1184: 2002 Code of Practice on Access for Disabled People to Public Buildings and MS 1331: 2003 Code of Practice on Access for Disabled People Outside Buildings. Thus, this has opened up possibilities for physical improvements that may be implemented in a short term and long term basis for the building owners, operators and relevant parties involved in enhancing accessibility in tourism buildings to make it socially sustainable.

Keywords: *Accessible tourism; Accessibility; Persons with disabilities (PWDs); Universal Design.*

INTRODUCTION

Accessible tourism is an emerging market niche that provides the rights of disabled persons to enjoy equal benefits when they travel independently or with assistance. It is where the tourist destinations and facilities provided by the host country or place are accessible to all people especially persons with disabilities (PWDs). Accessible tourism is an access requirement needed by the disabled persons (visual impairment, hearing impairment, physical impairment, learning difficulty (i.e. autism), cerebral palsy) including children in prams, mother with small children, pregnant woman and elderly when they are travelling (Darcy and Dickson, 2009; Alen *et.al*, 2012; Schitko and Loosekot, 2012; Akinci, 2013). It is also important when PWDs travel all around the world they are able to move and use every accessible design facilities within their environment independently with the best option without assistance from everyone. Even though there various terms to describe 'accessible tourism' such as 'inclusive tourism', 'barrier free tourism' or 'disabled tourism', the concept of this type of tourism is still similar which is to provide facilities or services without barriers for all tourism activities. It can be said that accessible tourism falls also under the category of 'sustainable tourism' as it aims to provide equity to all users.

In addition, the idea of 'Accessible Tourism for All' is becoming common globally world through what has been mooted at the United Nation Convention on the Rights of Person with Disabilities. During this international treaty signed by 160 signatories (including Malaysia) nations agreed to protect the rights and dignity of the person with disabilities (United Nations, 2012). This convention aimed in giving equality rights to disable persons to live independently and move freely among able-bodied persons through communication, reasonable accommodation, and universal design (Ibid). However, being a new resolution there are still issues on seamless mobility and lack of accessibility to the PWDs when they travel as these there are still very few facilities provided according to the universal design standards. For instance, tourism facilities such as continuous pathways, tactile surfaces, clear and bright signage should provide appropriately to the PWDs (Luiza, 2010).

By 2020, KL city envisage to become a world - class metropolis and achieve a high - income nation status (The Sun Daily, 2016). It is also expected that by 2025, Malaysia total Gross Domestic Product (GDP) will be 5.8% or RM95.96 billion through its direct contribution in tourism (World Travel and Tourism Council, 2015). Furthermore, the tourist arrivals in Malaysia have growth of 6.7% compared to 2013 attracted 27,437,315 tourists (Ministry of Tourism and Culture Malaysia, 2014). In addition, Kuala Lumpur City Hall as one of the government established local authority aims to double the foreign tourist arrivals and quadruple tourism income from RM19 billion in 2013 to RM79 billion by 2025 (Tourism Unit, 2015).

Due to the emerging global market of accessible tourism, pressure is set for Malaysia especially KL to also be able to accommodate the tourists and visitors who have disabilities and special needs to be given equal access, rights and opportunities to enjoy their travel and leisure experiences.

The Malaysian government have developed and established some guidelines in order to ensure the provision for the PWDs has been fulfilled in all public buildings. These guidelines are MS 1184: 2002 Code of Practice on Access for Disabled People to Public Buildings and MS 1331: 2003 Code of Practice on Access for Disabled People Outside Buildings. The guidelines emphasize on the universal design features namely internal

facilities (entrances of the doors and lobby, information counter, ramps, corridor, doors, stairways, elevators, lifts, emergency exits, handrails, guiding blocks, public and accessible toilets) and external facilities (public transport area, drop off area, accessible parking space and pedestrian access).

METHODOLOGY

This study refers to MS 1184 and MS 1331 as key documents on design standards and audit survey on the current accessibility state the attraction buildings have been carried out. Whilst observation technique has been adopted in which the trained buildings auditors employs;

- i. Audit surveys checklist (focus on in the internal and external building).
- ii. Observation mapping and visual photograph survey.

During the access audit, the trained accessible buildings auditors were assisted by the operations or management of the selected tourism facilities to obtain information pertaining to the universal design facilities provided in those buildings. The key objective of this study was to carry out accessibility audits on selected popular tourist attractions buildings in the city of KL namely National Planetarium (NP), Islamic Arts Museum Malaysia (IAMM), National Museum (NM), National Textiles Museum (NTM) and Royal Museum (RM).

In this study, researchers have derived the table from Jamaluddin and Abdul Kadir (2012) study on the accessibility tourist attraction access audit. The table was based on the trained accessible buildings auditors measurement and observation of those tourist attractions buildings facilities. The items are derived from the MS checklist to the scoring system indicating the level of accessibilities of those buildings. The scores are based on five (5) point scale (5 = Excellent/all requirements are met, 4 = Good/most requirement are met, 3= Fair/equal amount of requirements complied and not complied, 2 = Satisfactory/most requirements are not met and 1 = Poor/facility is not provided). These scores will determine the accessibilities of the audit buildings. The checklist and observation mapping are analyzed respectively.

CASE STUDIES

There were five (5) case study buildings that have been accessed for these universal designs study. The buildings have been selected amongst the top listed tourist attractions in the heart of KL city. These were also buildings which allowed access to the auditing exercise out of eight (8) shortlisted buildings that the researchers seek permission from the operations or management of the buildings in KL.

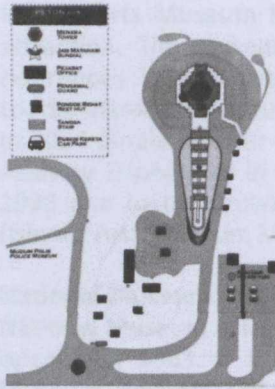


Figure 1.0 Building layout of National Planetarium

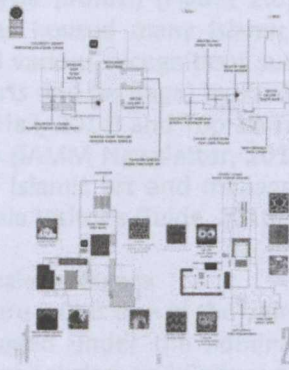


Figure 2.0 Building layout of Islamic Arts Museum Malaysia

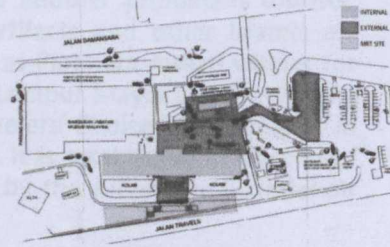


Figure 3.0 Building layout of National Museum

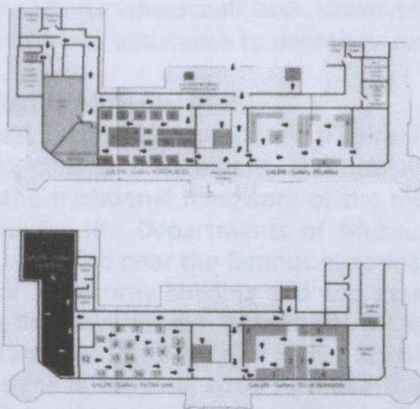


Figure 4.0 Building layout of National Textile Museum

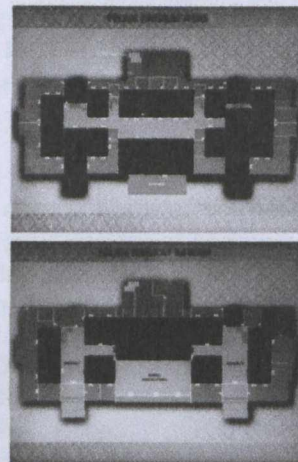


Figure 5.0 Building layout of Royal Museum

National Planetarium (Np)

The National Planetarium (NP) (Figure 1.0) is one of the popular tourists' attractions that have unique architecture and facilities provided to the visitors. It was established in 1994 under the Ministry of Science, Technology, and Innovation as part of the government's commitment to the development of science and technology in Malaysia (The National Planetarium, 2016). This educational building provided many programs for school children with facilities that include an exhibition gallery, a viewing gallery with binoculars, a theatre, an observatory with telescope, an outdoor ancient observatory park, and a spaced themed picnic building (Tourism Unit, 2015). This complex is situated on the top of a hill at Jalan Perdana seat among other KL city tourist attractions. At this moment, the exhibition gallery has been temporarily closed until July 2016 due to the development of the facilities provided to the visitors.

Islamic Arts Museum Malaysia (Iamm)

Islamic Arts Museum Malaysia (IAMM) (Figure 2.0) is another prominent tourists' attraction. The museum has housed many Islamic artifacts and other Islamic art references. It been awarded various recognitions such as Platinum Award winner for tourist attraction (culture, arts and heritage) by Kuala Lumpur Mayor Tourism Award in 2014 (Kuala Lumpur City Hall, 2014) and Top 10 Travelers' Choice Museum (10th in Asia) by TripAdvisor in 2014 (IAMM Newsletter, 2014). It is established in December 1998 due to the growth of Islamic art and managed by the Albukhary Foundation (Islamic Arts Museum Malaysia Visitor's Guide, 2016).

National Museum (Nm)/ Muzium Negara

National Museum (NM) (Figure 3.0) is one of the oldest museums building in Malaysia opened in 1963. It is managed under the administration of the Departments of Museum Malaysia, Ministry of Tourism and Culture as its function preserving artifacts and educational activities such as research, collect, record and publish all the heritage of the country's history (Muzium Negara, 2016). This unique architecture is an interpretation of traditional Malay architecture house and Malay motifs on a larger scale. It is a two story building consists of four (4) themed galleries; early history, the Malay kingdoms, the colonial era and Malaysia today (Muzium Negara Visitor's Guide, 2016). Accessible parking area is also provided by the museum management to the PWDs especially for wheelchair user. However, the PWDs can inform the management if they need further assistance to park their car near the grand entrance.

National Textile Museum (Ntm)

The National Textile Museum (NTM) (Figure 4.0) is a specialized museum, whose role is to collect, conserve, document, and display the diverse national textiles collection, especially the traditional handwork of the multi-ethnic society of Malaysia. It is also managed under the Departments of Museum Malaysia, Ministry of Tourism, and Culture. It is located near the famous historical district of Sultan Abdul Samad building consisted of 2 ½-storey building and was gazetted on 13 October 1983 as a heritage building in the Government Gazette PU (A) 423, Order of Old Monuments and Sites Historical Land (No. 3), Bendapurba Act 1976 (Textile Museum, 2016). It is opened to public since 9 January 2010 and has five galleries; Pohon Budi, Pelangi, Teluk Berantai, Ratna Sari and Saindera (National Textile Museum Visitor's Guide, 2016). The building is accessible to the visitors at the ground and first floor only. The public area consists of galleries, resource centre, museum shop and cafeteria. The management of the museum provided only one accessible parking at the side of the building, which is demarcated properly. However, the PWDs' visitors have to inform the management first if they wanted to use the parking as it is not directly access to the accessible pathway.

Royal Museum (Rm)

Royal Museum (RM) (Figure 5.0) is one of the latest tourism products in Malaysia. It is also managed by the Ministry of Tourism and Culture, under the Departments of Museum Malaysia as NM and NTM. This 11 hectares site is located on the slope of a hill of Bukit Petaling, where the main visitor access is along Jalan Syed Putra. Previously, this building is a family home for the Chinese tin tycoon Chan Wing in 1928, then it was used as the residence of the Japanese Governor during World War II occupation and later in 1957 it became the official residence of the King and Queen of Malaysia until 2011 (Jabatan Muzium Malaysia, 2016). It is now converted into a museum and is open to public.

FINDING AND DISCUSSIONS

The accessible facilities provided in those tourist attraction buildings was evaluated and summarized in Table 1.0 according to the audit survey checklist and observation

through photographs respectively. The findings revealed that IAMM (58.82%) provided better accessible facilities than the other tourist attraction buildings. In other words, IAMM meet most of the universal design requirements in terms of provision of accessibility facilities for the external and internal. This result is followed respectively by NP (44.71%), NM (43.53%), NTM (42.35%), and RM (35.39%). Majority of the buildings (according to the green indicator, level of accessibility = 3) fairly have fulfil the requirements but not meet and complied with MS 1184 and MS 1331 as well as the universal design standards.

Table 1.0 Evaluations of tourist attraction buildings based on design requirements
From MS 1184 and MS 1331

Buildings	National Planetarium	Islamic Arts Museum Malaysia	National Museum	National Textile Museum	Royal Museum
External					
a. Footpath	3	3	2	2	3
b. Curb Ramps/Ramps	1	2	1	2	1
c. Stairs and Railings	3	3	2	1	3
d. Accessible Parking Space and Drop off Area	2	3	3	2	1
e. Taxi Stands and Bus Stops	1	3	2	2	1
f. Pedestrian Crossing	2	3	2	2	1
g. Street Furniture	2	1	2	1	2
h. Guiding Blocks	1	1	1	1	1
Internal					
a. Entrance and Reception Area	2	3	2	2	2
b. Pathway/Corridor	2	3	3	3	3
c. Room and Spaces	2	3	3	3	1
d. Rest Rooms/ Toilets	3	3	3	2	3
e. Internal Doors	3	3	2	3	1
f. Lift / Elevators	2	3	3	2	1
g. Means of Escape/ Emergency Exit	2	3	3	2	1
h. Signage	3	3	1	3	2
i. Steps and Handrail	3	3	2	3	3
Score (out of 85)	38 (44.71%)	50 (58.82%)	37 (43.53%)	36 (42.35%)	30 (35.39%)

Score	Level of Accessibility
4	Excellent/ All requirements are met
3	Good/ Most requirement are met
2	Fair/ Equal amount of requirements complied and not complied
1	Satisfactory/ Most requirements are not met
0	Poor/ Facility is not provided

From the result, IAMM also provides better facilities (according to the blue indicator, level of accessibility = 4) to cater PWDs in terms of entrance and reception area, pathway/corridor, room and spaces as well as signage in the building. For instance, the building has better information counter rather than other case study buildings as it is more accessible for PWDs to enter from the main entrance and drop off area

towards main lobby to the counter. The drop off and entrance area is also give a sense of grand welcoming to the visitors. However, the information counter is not conveniently designed as it is too high to reach for wheelchair users.

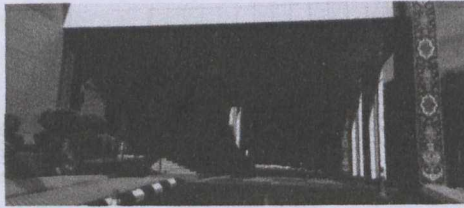


Figure 6.1 The drop off area provide sense of welcoming to the visitors.



Figure 6.2 there are no warning signs or colour contrast as the curb ramp is not visually visible to users

Other than that, the accessible toilet in NP is quite well designed as it has an automatic door to ease the wheelchair user. Besides that, the internal dimension is also sufficient for single person with wheelchair to mobilise. However, the wash basin and mirror have high (850mm), this dimensions are fixed according to the universal standards and can be uncomfortable for the wheelchair users to reach.



Figure 7.1 The NP accessible toilet has an automatic door to ease the wheelchair user.



Figure 7.2 The wash basin and mirror is not comfortable for wheelchair user as it is a bit too high (850mm) to reach.

RM is the least accessible for PWDs visitors. This is due to the lacks of UD facilities incorporated in its building design (according to the yellow indicator, level of accessibility = 1) in terms of its internal and external building. For instance, there are no accessible parking space and drop off area provision for the PWDs. The visitors have also to walk up the hill to get to the museum from the main gate and it is impossible for a wheelchair user to go up on their own due to the gradient of slope. However, as alternative the management has provided buggy services for the PWDs and elders from the main gate to the museum. Yet it was not sure as how the wheelchair users are brought up on to and brought down from the buggy.



Figure 8.1 There are no designated accessible parking space for PWDs at the main entrance.



Figure 8.2 The wheel chair user will have difficulty to up on their own because the slope of the hill.

In general, all the case study buildings also lack of facilities such as guiding blocks and curb ramps/ramps. In terms of guiding blocks, all of the tourist attraction buildings have poor facilities to the PWDs. While, NP, NM and RM lack of curb ramps/ramps facilities in the building. Even though the facilities are mandatory to be provided but these external facilities are less accessible because it is in poor condition or not provided at all (according to the yellow indicator, level of accessibility = 1) by the building management. For instance, the access from the pedestrian crossing (from Sultan Abdul Samad building) to the NTM is not accessible for PWDs. This is because there are no ramps and guiding tactile provided to lead the visitors from the opposite road to the main entrance. Guiding blocks and ramps are important for visually impaired people because they depend more on the tactile as guidance. If the guiding blocks are not properly installed it will be difficult and confusing for the visually impaired people to move independently.



Figure 9.1 The PWDs accessible parking in NM is not properly demarcated.



Figure 9.2 The ramp and guiding tactile is not available for PWDs to cross the pedestrian towards the museum.

Besides that, on the positive side, these tourist attraction buildings have provided other additional facilities to the visitors. For instance, IAMM, NM and NTM have provided the wheelchair facilities to the PWDs visitors. IAMM also provided wheelchair and stroller room as well as other facilities such as restaurant, shop, fountain garden, special galleries, auditorium, education centre, children's and scholar's library provided for its visitors. Whilst, NM complex have provided wheelchair facilities for the PWDS, guided tours (by the museum volunteer in English, French, Japanese, Malay and Mandarin languages), Automatic Teller Machine (ATM), Muslim prayer room as well as lost and find centre.

However, it is noted that the cases are mostly older building, hence during the time it was designed and built there had been no requirements or guidelines on accessibility. These buildings will need to take some measures and prepare funding to renovate their facilities. From the access audit, it is recommended that the operators or building management to provide better universal design facilities as so it can bring in more visitors and income to the venues. For instance, audio assistance such as museum wearable is one of the options to the visual impairment visitors who come to the museum or exhibition venues as it will allows them to experience the surrounding areas (Sparacino, 2002). Furthermore, informative braille plates for the visual impaired as well as other materials that have large fonts and colour contrasts are one of the best initiatives to provide better universal design facilities in the tourist attraction buildings (Barrier Free Access (Hong Kong) Limited, 2015).

Accessible tourism has also contributed to the tourism businesses owners especially tour operators, travel agents and hotel providers. This is because PWDs can be a loyal and repeated customer to the same provider year by year. For instance, 12% of all overnight domestic trips between January and June 2009 were made by visitors with access needs contributing almost £1 billion to the England's' economy (Department for Culture, Media and Sports (DCMS), 2008). While in 2011, Malaysia had received 15% of the tourist are PWDs and 20% are the seniors which amounting to a total of

RM20.4billion (Kwan, 2012). It shows that, more business owners have the awareness to provide better accommodation, facilities, attractions, services offer and detailed information to the disabled. A good first impression will encouraged the PWDs to travel and likely to come again to the same place if the conditions are right. Due to this, it will encourage more tourists visiting the tourism buildings facilities and attract more PWDs in the South East Asian region (Kwan, 2012).

CONCLUSION

In conclusion, this study supports the Disabled Person Act, MS 1184: 2002 and other supporting document to provide rights of travel and use of tourist buildings facilities for PWDs. Based on the audit survey and observation made, some of the attractive buildings have met partially the universal design standards and MS 1184: 2002 Code of Practice on Access for Disabled People to Public Buildings and MS 1331: 2003 Code of Practice on Access for Disabled People Outside Buildings. However, there are buildings that require stronger efforts in improving their accessibility level. It is highly recommended that some of the facilities needs to be upgraded and improved to refer to the universal design standards, MS 1184: 2002 and MS 1331: 2003. It is also suggested that those plans to upgrade and refurbish their facilities may be executed in phases such as improvement in short term and long term basis according to the level of condition in each audited buildings. These guidelines and its constant reviews are important to the future well-being of the PWDs as we move towards a better developed nation. Careful and correct implementation of the universal design is essentially important to adapt because it can efficiently cater the needs of the PWDs and provide pleasant and barrier free travel experiences.

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